



Customer No. 22,852 Attorney Docket No. 04208.0191-00

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re Application of:	)
Koichiro UENO et al.	) Group Art Unit: 2811
Application No.: 10/571,287	) Examiner: Unassigned
Filed: March 9, 2006	<i>)</i> ) ) Confirmation No.: 8132
For: INFRARED SENSOR IC, AND INFRARED SENSOR AND MANUFACTURING METHOD THEREOF	) ) ) ) )

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents on the attached listing. To the knowledge of the undersigned, this Information Disclosure Statement ("IDS") is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed foreign patent documents and non-patent literature are attached. Copies of the U.S. patent publications are not enclosed.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form PTO/SB/08 and returning the form with the next communication from the Office.

Applicants advise that GB 1516627 and US 4970567 correspond to JP 53-58791 and JP 2-502326, respectively, cited in the specification of this application.

Applicants also advise that Kunihiko Matsui, "Practice Know How of Sensor Use 141," CQ Publishing Co., Ltd., May 20, 2001, pp. 56 discloses a pyroelectric-type infrared sensor having extremely high impedance and is susceptible to noise.

Accordingly, it requires an electrical shield.

Furthermore, Applicants advise that JP 2000-269537, JP 62-257773, JP 5-160429 and JP 6-196745 are non-English documents. Partial English translations of these non-English documents are enclosed

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application. If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: December 13, 2006

Steven L. Ashburn Reg. No. 56,636 IDS Form PTO/SB/08: Substitute for form 1449A/PTO

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Not yet assigned

04208-0230-00000

Application Number 10/571,287
Filing Date March 9, 2006
First Named Inventor Koichiro UENO et al.
Art Unit Not yet assigned

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Examiner Name

Attomey Docket Number

Examiner Initials	Cite No.1		Issue or	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
			Publication Date MM-DD-YYYY		Relevant Passages or Relevant Figures Appear	
/T.G./		US-6,037,614	03-14-2000	He et al.		
П		US-5,959,340	09-28-1999	Wan et al.		
		US-5,650,635	07-22-1997	Razeghi et al.		
$\neg$		US-5,455,421	10-03-1995	Spears		
		US-5,016,073	05-14-1991	Elliott et al.		
		US-4,970,567	11-13-1990	Ahlgren et al.		
-		US-				

No e: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

П	FOREIGN PATENT DOCUMENTS						
Exa Init		Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>6</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>
			GB 1 516 627 (corresponds to JP 53-58791)	07-05-1978			
			WO 96/05621	02-22-1996			
			JP 2000-269537	09-29-2000			Abstract
			JP 62-257773	10-11-1987			Abstract
П			JP 5-160429	06-25-1993			Abstract
			JP 6-196745	07-15-1994			Abstract

## NON PATENT LITERATURE DOCUMENTS Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item Translation<sup>6</sup> ials Nο (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. MATSUI, Kunihiko; "Practice Know how of Sensor Use 141," CQ Publishing Co., Ltd., May 20, 2001, pp. 56. partial THOMPSON, A.G. et al. "Energy-Gap Variation in Mixed III-V Alloys," Canadian Journal of Physics. October 27, 1966, pp. 255-261, Vol. 45, Ottawa, Canada. YAMAMOTO, K. et al., "Development of JFET amplified InSb infrared detector array for use at liquid helium temperature", SPIE, 1989, pp. 338-349, Vol. 1157. MICHEL, E. et al., "Sb-based infrared materials and photodetectors for the 3-5 and 8-12 µm range," SPIE, April 1996, pp. 101-111, Vol. 2685. KIM, J.D. et al., "8-13 µm InAsSb heterojunction photodiode operating at near room temperature," Applied

Examiner Signature	/Telly Green/	Date Considered	08/16/2009

ASHLEY, T. et al., "Ambient temperature diodes and field-effect transistors in InSb/In; "Al, Sb," Applied Phys.

Phys. Lett., October 30, 1995, pp. 2645-2647, Vol. 67.

Lett., September 30, 1991, pp. 1761-1763, Vol. 59.